

Appl. No. : 08/834,194
Filed : April 14, 1997

5 a signal processor operatively coupled to said detector, said signal
6 processor receiving said detector output waveform, said signal processor
7 configured to:

8 transform said detector output waveform into a spectral
9 domain waveform;

10 identify a series of spectral peaks and peak frequencies
11 corresponding to said spectral peaks in said spectral domain
12 waveform; and

13 apply a plurality of rules to said spectral peaks and said peak
14 frequencies in order to determine an estimate for said pulserate.

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B 1 4 18. (Amended) A physiological monitor attached to a living organism,
2 said organism [comprising] having a heart beating at an unknown pulserate, said
3 monitor comprising:

4 a detector responsive to physiological properties relating to said
5 heartbeats, said detector producing a detector output waveform; and

6 a signal processor operatively coupled to said detector, said signal
7 processor receiving said detector output waveform, said signal processor
8 configured to:

9 perform a first transform to transform said detector output
10 waveform into a waveform in a first transform domain;

11 perform a second transform, to transform said waveform in
12 said first transform domain into a waveform in a second transform
13 domain;

14 search said waveform in said second transform domain for a
15 largest spectral peak and a first frequency corresponding to said
16 largest spectral peak; and

17 compute an estimate of said unknown pulserate from said
18 first frequency.

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1 6 29. (Amended) The physiological monitor of Claim 28, wherein said
2 signal processor is further configured to:

3 search said waveform in said first transform domain for a highest
4 spectral peak and a second frequency corresponding to said highest spectral
5 peak; and

6 compute said estimate of said unknown pulserate from said second
7 frequency if said first frequency is above a threshold [frequency] frequency.

1 7 30. (Amended) In a physiological monitor attached to a living
2 organism, said organism [comprising] having a heart beating at an unknown
3 pulserate, said monitor having a detector responsive to physiological properties
4 relating to said heartbeats, said detector producing a detector output waveform, a
5 method comprising the steps of:

6 performing a first transform to transform said detector output
7 waveform into a waveform in a first transform domain;

8 performing a second transform, to transform said waveform in said
9 first transform domain into a waveform in a second transform domain;

10 searching said waveform in said second transform domain for a
11 largest spectral peak and a first frequency corresponding to said largest
12 spectral peak; and

13 computing an estimate of said unknown pulserate from said first
14 frequency.

REMARKS

In response to the June 10, 1998 Office Action, Applicants respectfully request the Examiner to reconsider the above-captioned application in view of the foregoing amendments and the following comments.